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In the Claims:

1-4. (canceled)

5. (currently amended) ~~A near-hermetic~~ The microwave semiconductor device comprising:

~~a substrate;~~

~~a Monolithic Microwave Integrated Circuit (MMIC) disposed on said substrate;~~

~~a sealant disposed on said MMIC comprising a layer of silicon carbide; and~~

~~a Backside Interconnect connecting said substrate to said sealant coated MMIC,~~

including according to claim 30, wherein said backside interconnect includes plated-through vias disposed in said MMIC extending between opposite faces of said MMIC, and tying to terminals on said substrate.

6. (canceled)

7. (canceled)

8. (currently amended) The microwave semiconductor device according to claim ~~[[5]]~~ 30, wherein the device is substantially free of bond wires and solder balls.

9. (currently amended) The microwave semiconductor device according to claim ~~[[1]]~~ 30, further comprising a plurality of rest vias connecting the MMIC to a bottom ground plane of the substrate.

10. (canceled)

11. (currently amended) The microwave semiconductor device according to claim ~~[[10]]~~ 32, wherein the said solder attachment is formed using AuSn solder.

12. (canceled)

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13. (currently amended) The microwave semiconductor device according to claim ~~[[12]]~~ 33, further comprising a cover disposed over said conformal-coated MMIC in a non-contacting manner.

14-17. (canceled)

18. (currently amended) The ~~near-hermetic~~ microwave semiconductor device according to claim ~~[[17]]~~ 30, wherein the device is substantially free of solder balls and bond pads and said coating is a low dielectric having a dielectric constant suitable for operating at an operational frequency between about 2 GHz and about 10 GHz.

19-26. (canceled)

27. (currently amended) The microwave semiconductor device according to claim ~~[[6]]~~ 30, wherein said substrate is a PWB suitable for ultrahigh frequency applications.

28. (previously presented) The microwave semiconductor device according to claim 27, wherein said ultrahigh frequency applications include Phased Array Antenna (PAA) systems.

29. (previously presented) The microwave semiconductor device according to claim 27, wherein said substrate is formed of one of a liquid crystal polymer (LCP) and a ceramic.

30. (currently amended) ~~The A near-hermetic~~ microwave semiconductor device according to ~~claim 6~~, wherein comprising:

a substrate;

a Monolithic Microwave Integrated Circuit (MMIC) disposed on said substrate;

a sealant disposed on said MMIC and over benzocyclobutene (BCB) as an interlayer dielectric, said sealant comprises comprising a layer of silicon carbide; and

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a backside interconnect extending between opposite faces of said MMIC and connecting said substrate to said sealant-coated MMIC.

31. (currently amended) The microwave semiconductor device according to claim [[6]] 30, wherein said MMIC is a GaAs MMIC.

32. (currently amended) The microwave semiconductor device according to claim [[6]] 30, further comprising a solder attachment along a periphery of said MMIC, to seal said MMIC to said substrate.

33. (currently amended) The microwave semiconductor device according to claim [[6]] 30, further comprising a conformal coating disposed on said sealant.

34. (currently amended) The microwave semiconductor device according to claim [[6]] 30, further comprising a cover disposed on said MMIC.